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09/788,108	02/22/2001	Thomas A. Manning	109898.125	4591

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HALE AND DORR, LLP  
60 STATE STREET  
BOSTON, MA 02109

EXAMINER

PUENTE, EMERSON C

ART UNIT	PAPER NUMBER
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2113

DATE MAILED: 05/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/788,108

Applicant(s)

MANNING ET AL.

Examiner

Emerson C Puente

Art Unit

2113

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 25 February 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☐ Claim(s) \_\_\_\_\_ is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1, 2, 5 and 6 is/are allowed.
- 6) ☒ Claim(s) 3, 4, 7 and 8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 February 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

This action is made **FINAL**. Claims 1-8 have been examined.

#### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –  
(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 3 and 7 are rejected under 35 U.S.C. 102(e) as being anticipated by US Patent No. 6,614,752 of Parrish et al. referred hereinafter "Parrish".

In regards to claim 3, Parrish discloses a system for indicating and determining a master unit from a plurality of logic units, comprising:

a first logic unit configured to output a first obey signal (see figure 1 item 12);

a second logic unit configured to output a second obey signal, wherein the first obey signal and the second obey signal are clocked signals (see figure 1 item 12 and column 9 lines 58-65); and

a mastership determination logic control unit coupled to the first and second obey signals, the mastership determination logic unit configured to monitor the first and second obey signals. Parrish discloses the detection of a loss of signal or other fault associated with the "A" system clock signal (see column 10 lines 10-15), thus indicating a mastership determination logic

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control unit coupled to the first and second obey signals, the mastership determination logic unit configured to monitor the first and second obey signals.

wherein the mastership determination logic unit is further configured to indicate whether the first or second logic unit is the master unit based on the first and second obey signals. Parrish discloses the switchover to the "B" system clock signal when the master clock signal "A" fails, making B the master clock signal, thus indicating the first or second logic unit is the master unit based on the first and second obey signals (see column 10 lines 10-15).

In regards to claim 7, Parrish discloses a method and determining a master unit from a plurality of logic units, comprising:

determining that a first logic unit is the master logic unit when only a first obey signal output is time varying (see column 9 line 58 to column 10 lines 4);

determining that a second logic unit is the master unit when only a second obey signal output is time varying. Parrish discloses if the clock master (first logic unit) has failed, it becomes isolated, thus indicating only the other controller or second logic unit is time varying, and a switchover to the "B" system clock is initiated, thus making the other switch unit controller or second logic unit the master (see column 10 lines 9-25).

determining that the first logic unit is the master unit when a first signal received by the first logic unit and a second signal received by the second logic unit are time varying in-phase. Parrish discloses a master controller and a slave controller that synchronizes its "B" frame pulses with the "A" frame pulses from the master, indicating the first logic unit is master unit when a first signal received by the first logic unit and a second signal received by the second logic unit are synchronized or time varying in-phase (see column 9 lines 15-30).

determining that the second logic unit is the master unit when the first and second signals are time varying out-of-phase. Parrish discloses in response to other faults associated with "A" system clock (which would result in loss of synchronization, thus indicating a time varying out-of-phase signal), a switchover to the "B" system clock is initiated, thus making the other switch unit controller or second logic unit the master (see column 10 lines 9-25).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Parrish in view of US Patent No. 5,422,915 of Byers et al. referred hereinafter "Byers".

In regards to claim 4 and 8, Parrish discloses wherein the first and second obey signals are analyzed by the mastership determination logic unit to detect a fault when it occurs.

However Parrish fails to disclose wherein the first obey signal includes a redundant trace signal and the second obey signal includes a redundant trace signal.

Byers discloses a primary clock signal drive and a redundant clock signal drive, indicating a redundant trace signal (see figure 6 item 106,108, 110,112 and column 11 lines 25-30).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teaching of Parrish wherein the first obey signal includes a redundant trace signal and the second obey signal includes a redundant trace signal. A person of ordinary skill in the art would have been motivated to make the modification to Parrish because redundant clock signal drive or redundant trace signals provides clock signal which can be selected upon a failure of the primary, as per teaching of Byers (see column 11 lines 30-34).

***Allowable Subject Matter***

Claims 1-2 and 5-6 are allowed for reasons stated in the previous office action.

***Response to Arguments***

Applicant's arguments filed February 25, 2004 have been fully considered but they are not deemed to be persuasive.

In response to applicant's argument regarding claim 3 on page 5 of remarks, "The reference is silent as to how mastership is determined and simply says that service providers are first instructed to synchronize to one clock and then to the other. Parrish does not teach or suggest how mastership is determined," examiner respectfully disagrees.

The claim limitation cites "wherein the mastership determination logic unit is further configured to indicate the first or second logic unit is the master unit based on the first and second obey signal". Parrish discloses initially designating a particular switch control unit 12 as the master clock and the other switch control unit 12 as the clock slave (see figure 1 item 12 and column 9 lines 58-65). He further states upon fault of the A system clock signal received from

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the clock master, there is a switchover to the B system clock signal received from the clock slave (see column 10 lines 9-17), making the other switch control unit who is designated as the clock slave, now the master unit, thus indicating a “mastership determination logic unit is further configured to indicate the first or second logic unit is the master unit based on the first and second obey signal”, as cited in the claim. Examiner maintains his rejection.

In response to applicant’s argument regarding claim 7 on page 6 of remarks, “Parrish just discloses synchronization and doesn’t make any determination based on whether a signal is in phase or out of phase. The Examiner argues that a lost signal and an out-of-phase signal are synonymous. Applicant respectfully disagrees. A lost signal has no phase and is not considered be in phase or out of phase even when those terms are construed broadly...”, examiner did not disclose a lost signal and an out-of-phase signal are synonymous. Rather, examiner states that Parrish discloses in response to “other fault” (not “lost of signal”) associated with “A” system clock, which would result in loss of synchronization, thus indicating a time varying out-of-phase signal (see column 10 lines 9-25). Argument is moot. Examiner maintains his rejection.

In response to applicant’s argument regarding claim 4 and 8 on page 6 of remarks, “Neither Parrish nor Byers discloses redundant ‘obey signals’ or analysis of such to determine mastership control”, examiner respectfully disagrees. Parrish’s teaching, which discloses analysis to determine mastership control, in combination with Byer’s teaching, which discloses redundant obey signals (see rejection above), discloses redundant ‘obey signals’ and analysis of such to determine mastership control. Examiner maintains his rejection.

***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Emerson C Puente whose telephone number is (703) 305-8012. The examiner can normally be reached on 8-5 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert W Beausoliel can be reached on (703) 305-9713. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-5631.

***Emerson Puente***  
5/6/04

  
SUPERVISOR, EXAMINER  
TECHNOLOGY CENTER 2100